SA CLIMATE READY

Technical & Community Advisory Committee Meeting

January 26, 2022

Agenda

4:00 – 4:10	Welcome, Land Acknowledgement, Public Comment, Meeting Norms, Approval of Meeting Minutes
4:10 – 4:30	Update on 2022 Bond Program VOTE – Approval of Bond Letter
4:30 – 4:50	Update & Feedback on Unified Development Code Proposals
4:50 – 5:50	Energy Subcommittee Discussion VOTE – Energy Subcommittee
5:50 – 6:00	Open Space

Land Acknowledgement

"When we talk about climate change, we are talking about what the future holds for our younger, new generations and all life on this planet. However, it is important to reflect on those who were here before us for tens of thousands of years, who were stewards of this land, and who continue leading efforts to protect this land. By their example, we honor the seven generations before us, and the seven generations to come.

We acknowledge with respect that the land we are on is the traditional and ancestral homeland of the Coahuiltecan, Tonkawa, and Jumanos peoples and all other tribes not explicitly stated. Not all indigenous peoples listed, claim Texas as ancestral lands, as many were forcibly relocated to Texas from their ancestral homelands."

Race Equity

Race Equity as "the Result":

- The condition that would be achieved if one's racial identity no longer predicted, in a statistical sense, how one fares.

Race Equity as "the Work":

- When we use the term, we are thinking about racial equity as one part of racial justice, and thus we also include work to address root causes of inequities, not just their manifestation.
- This includes elimination of policies, practices, attitudes and cultural messages that reinforce differential outcomes by race or fail to eliminate them.

Source: Center for Assessment and Policy Development

Approval of Meeting Minutes

Public Comment

Meeting Norms

- Stay Engaged
- Speak Your Truth
- Practice Kindness
- No Fixing
- Experience Discomfort
- Take Risks
- Listen for Understanding
- Expect and Accept Non-Closure
- Members Speak in Queue without Interruptions

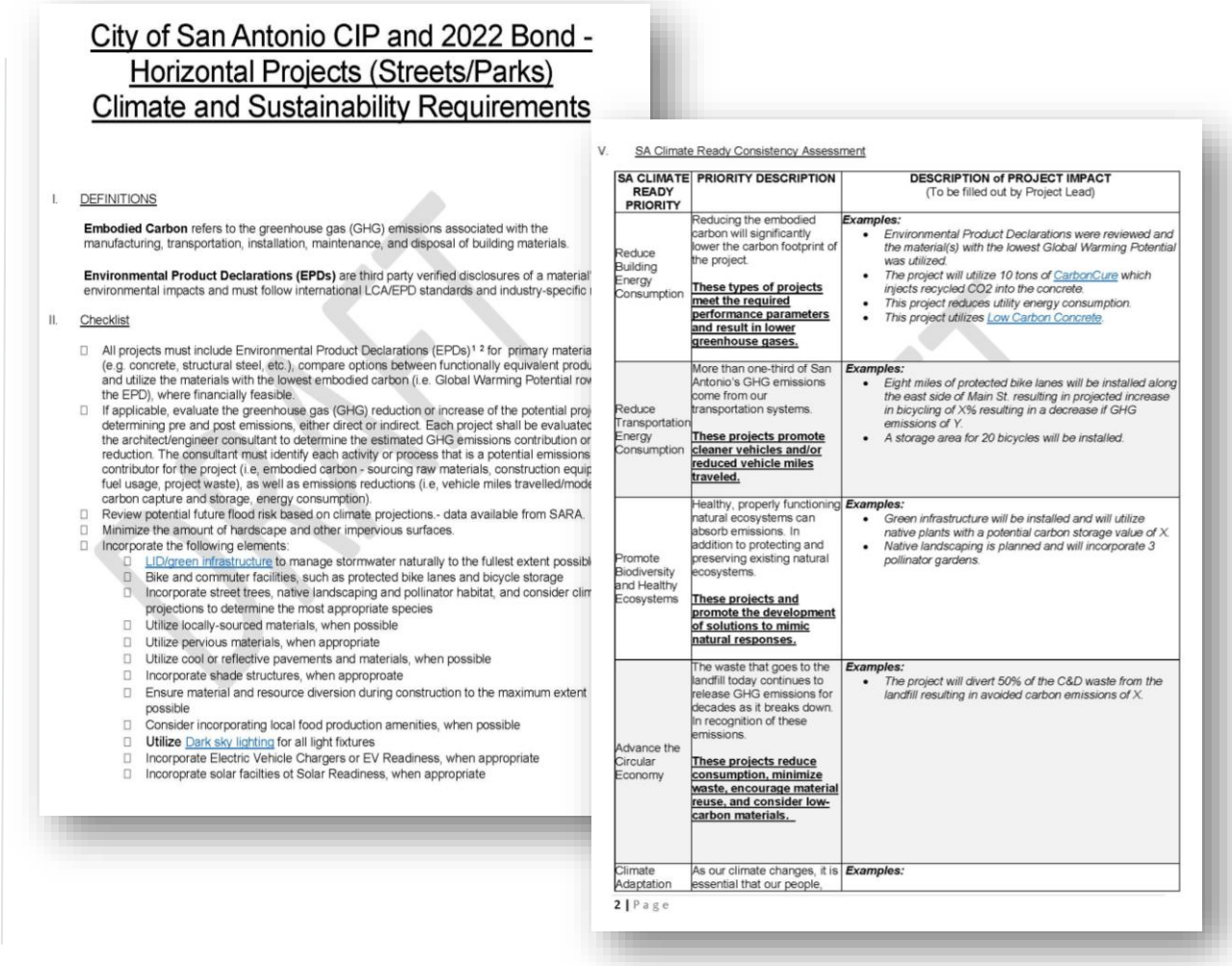
2022 Bond Update

Current OS Bond-Related Initiatives

Triple Bottom Line Cost Benefit Analysis for new construction and renovations:

Current CoSA Standard vs. BSAG Certification Level 3
Current CosA Standard vs. LEED Gold Certification

Feature	Baseline*	LEED Platinum/ZNE
Incremental Cost vs. Baseline	N/A	Additional $750K
Electricity Use	214 MWh	50% reduction
Natural Gas Use	46.7 MMBtu	0 MMBtu
Water Use	Indoor = 0.28m g/yr Outdoor = 1.6m g/yr	38% reduction
Solar PV	0 kWh	110,000 kWh
Thermal Controls	0%	50%
Quality Views	Poor/Medium	Good
Access to Daylight	30%	90%



City of San Antonio CIP and 2022 Bond - Horizontal Projects (Streets/Parks) Climate and Sustainability Requirements

I. DEFINITIONS

Embodied Carbon refers to the greenhouse gas (GHG) emissions associated with the manufacturing, transportation, installation, maintenance, and disposal of building materials.

Environmental Product Declarations (EPDs) are third party verified disclosures of a material' environmental impacts and must follow international LCA/EPD standards and industry-specific

II. Checklist

- ☐ All projects must include Environmental Product Declarations (EPDs)[1] [2] for primary materia (e.g. concrete, structural steel, etc.), compare options between functionally equivalent produ and utilize the materials with the lowest embodied carbon (i.e. Global Warming Potential ro the EPD), where financially feasible.
- ☐ If applicable, evaluate the greenhouse gas (GHG) reduction or increase of the potential proj determining pre and post emissions, either direct or indirect. Each project shall be evaluate the architect/engineer consultant to determine the estimated GHG emissions contribution or reduction. The consultant must identify each activity or process that is a potential emissions contributor for the project (i.e, embodied carbon - sourcing raw materials, construction equip fuel usage, project waste), as well as emissions reductions (i.e, vehicle miles travelled/mode carbon capture and storage, energy consumption).
- ☐ Review potential future flood risk based on climate projections.- data available from SARA.
- ☐ Minimize the amount of hardscape and other impervious surfaces.
- ☐ Incorporate the following elements:
  - ☐ LID/green infrastructure to manage stormwater naturally to the fullest extent possibl
  - ☐ Bike and commuter facilities, such as protected bike lanes and bicycle storage
  - ☐ Incorporate street trees, native landscaping and pollinator habitat, and consider clim projections to determine the most appropriate species
  - ☐ Utilize locally-sourced materials, when possible
  - ☐ Utilize pervious materials, when appropriate
  - ☐ Utilize cool or reflective pavements and materials, when possible
  - ☐ Incorporate shade structures, when approproate
  - ☐ Ensure material and resource diversion during construction to the maximum extent possible
  - ☐ Consider incorporating local food production amenities, when possible
  - ☐ **Utilize** Dark sky lighting for all light fixtures
  - ☐ Incorporate Electric Vehicle Chargers or EV Readiness, when appropriate
  - ☐ Incoroprate solar facilties ot Solar Readiness, when appropriate

V. SA Climate Ready Consistency Assessment

SA CLIMATE READY PRIORITY	PRIORITY DESCRIPTION	DESCRIPTION of PROJECT IMPACT (To be filled out by Project Lead)
Reduce Building Energy Consumption	Reducing the embodied carbon will significantly lower the carbon footprint of the project. **These types of projects meet the required performance parameters and result in lower greenhouse gases.**	***Examples:*** • *Environmental Product Declarations were reviewed and the material(s) with the lowest Global Warming Potential was utilized.* • *The project will utilize 10 tons of CarbonCure which injects recycled CO_2 into the concrete.* • *This project reduces utility energy consumption.* • *This project utilizes Low Carbon Concrete.*
Reduce Transportation Energy Consumption	More than one-third of San Antonio's GHG emissions come from our transportation systems. **These projects promote cleaner vehicles and/or reduced vehicle miles traveled.**	***Examples:*** • *Eight miles of protected bike lanes will be installed along the east side of Main St. resulting in projected increase in bicycling of X% resulting in a decrease if GHG emissions of Y.* • *A storage area for 20 bicycles will be installed.*
Promote Biodiversity and Healthy Ecosystems	Healthy, properly functioning natural ecosystems can absorb emissions. In addition to protecting and preserving existing natural ecosystems. **These projects and promote the development of solutions to mimic natural responses.**	***Examples:*** • *Green infrastructure will be installed and will utilize native plants with a potential carbon storage value of X.* • *Native landscaping is planned and will incorporate 3 pollinator gardens.*
Advance the Circular Economy	The waste that goes to the landfill today continues to release GHG emissions for decades as it breaks down. In recognition of these emissions. **These projects reduce consumption, minimize waste, encourage material reuse, and consider low-carbon materials.**	***Examples:*** • *The project will divert 50% of the C&D waste from the landfill resulting in avoided carbon emissions of X.*
Climate Adaptation	As our climate changes, it is essential that our people,	***Examples:***

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2022 Bond Program

Action:

Letter to Mayor & Council

- Climate & Sustainability checklist during the *design phase*
- For future bonds, adoption of checklist and prioritization *earlier* in the process

Status:

- Letter drafted by Stephen, Kelly, Kammy, OS
- Tech & Community to vote on approval

Discussion and Motion to Approve?

Unified Development Code Update

Prioritized UDC Amendments

Amendment	Definition
Introductory Language/ Consistency	Add SA Climate Ready to introduction of UDC
Parking	Increase the use of permeable material and/or green infrastructure; light fixtures designed to reduce light pollution; use of low-carbon materials
Transportation & Street Design	Use of alternative building materials to increase reflectivity; consider the use of low-carbon materials; dark sky compliant light fixtures; increase use of permeable pavement
Dark Sky	Parking lot light fixtures and streetlights compliant with dark-sky practices
Tree Preservation	Focus canopy increase on areas with high-combined equity scores or with significant Urban Heat Island; increase selection of tree species that are resilient to climate change

Sec. 25-523. – Tree Preservation

Added to Statement of Purpose

- *To ensure that the City of San Antonio maximizes tree canopy as a tool to address climate change, as trees sequester carbon, mitigating extreme heat, and improve air quality. This is particularly important in areas with a high combined equity score in the City of San Antonio's Equity Atlas, as well as areas with significant Urban Heat Island impacts. Tree species selection should consider future climate change impacts to ensure that San Antonio's overall tree population is more resilient to climate trends as outlined in the SA Climate Ready Plan.*

Other Amendments

Amendment	Definition	Code
EV Ready requirements	New residential and commercial have minimal infrastructure for the installation of EV chargers	Building-Related Codes
Solar Ready requirements	New residential and commercial have minimal infrastructure for the installation of solar	Building-Related Codes
Cool Roof requirements	New residential and commercial utilize roofing materials with a high reflectivity index	Building-Related Codes

Energy Subcommittee Discussion

Energy Subcommittee

Background:

- August 2021 – Original proposal was submitted
- October 2021 – Committee requested additional information
- December 2021 – Presentations from CPS Energy, the Sierra Club, and Dr. Cantu

Initial Proposal:

- Call for the closure of the Spruce Coal Plant no later than 2030 and transition the two units to renewable energy sources-solar, wind and battery.
- Work with CPS Energy to further decarbonize our energy supply through the Flexible Path to meet the 2030 emissions reduction target.

Time Commitment:

Twice a month one hour subcommittee meetings

Energy Subcommittee

New Motion:

To create an Electrical Generation subcommittee whose role would be to:

1. Understand CPS' modeling strategies and mechanics
2. Maintain a constant dialogue with CPS
3. Report to and make recommendations to the Technical and Community Advisory Committee regarding the most expedient path to zero electrical generation emissions.

Open Space

Proposals for New Business/Priorities

1. Submit recommendation through email to Chair, Vice-Chair, and OS staff, then discuss during "Open Space"
2. Prepare a one-page document summary including the following:
   - Background
   - Main goals
   - Time commitment
   - The "ask" (i.e., subcommittee, policy recommendation, research)
3. Secure a co-sponsor from the other committee
4. Present the proposal during the following Committee meeting
5. New business/priorities will only be considered if there is significant interest from the rest of the Committee members – to be defined by the "ask."

2022

Proposed Meeting Schedule – 2022

Committee	Date	Time
Tech & Community	January 26, 2022	4:00 – 6:00 PM
Climate Equity	January 27, 2022	4:00 – 6:00 PM
Combined - proposed	March 30, 2022	4:00 – 6:00 PM
Combined - proposed	May 25, 2022	4:00 – 6:00 PM
Combined - proposed	July 27, 2022	4:00 – 6:00 PM
Combined - proposed	September 28, 2022	4:00 – 6:00 PM
Combined - proposed	November 30, 2022	4:00 – 6:00 PM

Adjourn

UDC Amendment Timeline

~~November:~~

- ~~Tech & Community Committee voted on their preferred amendments~~
- ~~OS Staff will draft details committee review~~

~~December:~~

- ~~OS Staff to draft recommended language~~

January:

- ~~Committees review proposal language~~
- Committees endorse proposals and OS will submit to DSD

February :

- Amendment submission deadline

sanantonio.gov/DSD/Resources/Codes#154541587-udc-updates

Sec. 35-105. – Consistency with Master Plan

Added 35-105(b)(9)

*(9) **SA Climate Ready Plan.** Adopted October 17, 2019 by Ordinance No. 2019-10-17-0840. On June 22, 2017, the San Antonio City Council passed a Resolution No. 2017-06-22-0031R in support of the Paris Climate Agreement's goals to keep global climate change to no more than 1.5°C by the end of the century and to adapt to climate impacts with a focus on vulnerable populations. These impacts include, but are not limited to, increased temperatures, increased potential for extreme cold events, increased drought, and more severe flooding, extreme weather events, and resulting health and economic impacts. City Council directed City Staff to develop a plan to meet the objectives of this agreement. The SA Climate Ready Climate Action and Adaptation Plan (CAAP) will be updated to ensure that the targets and strategies align with the best science available from organizations such as the Intergovernmental Panel on Climate Change (IPCC). As climate change does not impact all communities the same way, the CAAP prioritizes climate equity to ensure that frontline communities, those communities who will experience climate impacts first and with the most severity, and includes BIPOC (Black, Indigenous, People of Color), low-income, the elderly, children, and the disabled are at the center of implementation.*

Sec. 35-506. – Transportation and Street Design

Amended/Added Urban Design, Policy 5f

- *Urban Design, Policy 5f:* Consider the use of alternative surface materials to increase durability*, as well as increasing reflectivity to reduce Urban Heat Island (UHI) impacts.*
- *Urban Design, Policy 5f: Consider the use of low-carbon materials, as these materials are less carbon intensive than traditional materials and can be identified by evaluating Environmental Product Declarations (EPDs) for construction materials.*

Added 35-506(i)(1) - **Street Lights**

(1) Streetlights shall be provided in all subdivisions within the city. Streetlights are not required in the ETJ. However, if proposed by the applicant, all installation, operational and maintenance cost shall be borne by the developer. Streetlights shall be installed by CPS Energy at all public street intersections with other public streets, at the end of cul-de-sacs longer than two hundred (200) feet, crosswalks, at safety lane intersections with public streets, midblock areas placed such that streetlights are a minimum of three hundred (300) feet apart for residential streets with houses fronting, or service areas as determined by CPS Energy. *Streetlight fixtures shall be Dark Sky-compliant and conform with Section 35-339.04(F)(15).*

Sec. 35-506. – Transportation and Street Design

Amended 35-506(p)(6)

(6) **Pavement Layer Material.** Alternative pavement materials may be used where the existing soil or subsurface conditions, or the alternative materials, provide a level of drivability comparable to the materials otherwise required by this section. Proposals for alternative pavement materials with supporting engineering documentation may be submitted to the city for consideration for use. The combination of the following materials will be allowed for pavement structure:

A. Lime treatment for subgrade.

B. Flexible base.

C. Prime coat.

D. Tack coat.

E. Hot mix asphaltic concrete pavement.

F. Asphalt treated base.

G. Reinforced concrete.

H. Base reinforcement (Geogrids).

Permeable pavement is encouraged, but not required, where soils are appropriate, and cool pavement asphalt treatments or concrete with a solar reflectivity of at least 33% are encouraged, but not required, for residential streets to mitigate Urban Heat Island (UHI) impacts.

The director of planning and development services in consultation with the director of public works in accordance with the standards provided herein must approve the pavement combination.

Sec. 35-506. – Transportation and Street Design

Added 35-506(q)(1)(F)

(1) **Applicability.**

A. Sidewalks shall be required on both sides of all streets and the subdivision side of all adjacent or perimeter streets except as specified in subsection (2) below.

B. All nonresidential, residential corner and reverse residential street lots shall have sidewalks provided on both street frontages.

C. Sidewalks shall be required as part of the street improvements at the following locations:

i. Along the entry street of a gated private street subdivision where a pedestrian access gate is provided.

ii. The rear of a reverse residential street lot.

iii. Drain crossings.

iv. Along the street frontage of existing developed lots when streets are extended.

D. Sidewalks located in the right-of-way in place at the time of platting or permitting that meets the criteria under subsection 35-506(a)(1)C.2. for sidewalks to be evaluated, which do not meet minimum standards of this chapter, Americans with Disabilities Act and Texas Accessibility Standards requirements shall be reconstructed to meet the most stringent minimum standards.

E. All sidewalk construction shall conform to the latest most stringent criteria of the Americans with Disabilities Act (ADA) and the Texas Accessibility Standards (TAS) (see subsection 35-501(g) herein).

F. Low carbon concrete is encouraged, but not required, and can be identified by evaluating material Environmental Product Declarations (EPDs).

Sec. 35-526. – Parking and Loading Standards

Amended 35-526(f)(1)

(1) **Drainage and Surfacing.** Areas shall be properly graded for drainage, surfaced with concrete, asphaltic concrete, or asphalt and maintained in good condition free of weeds, dust, trash and debris*, and utilize permeable materials and/or green infrastructure if appropriate, but is not required. To help mitigate Urban Heat Island (UHI) impact, cool pavement asphalt treatments or concrete with a solar reflectivity of at least 33% is encouraged, but not required.*

Amended 35-526(f)(4)

(4) **Lighting.** Facilities shall be arranged so that the source of light is concealed from public view and from adjacent residential properties and does not interfere with traffic. *Fixtures shall be Dark Sky-compliant to reduce light pollution, provide better lighting quality, decrease energy consumption, improve the health and well-being of residents and visitors, protect wildlife and plant life, and decrease unsightly and dangerous glare. All lighting shall utilize appropriate color temperature not to exceed 3000° Kelvin and comply with Section 35-339.04(F)(12).*

Added 35-526(f)(10)

*(10) **Low Carbon Materials.** Low-carbon materials are encouraged, but not required, as these materials are less carbon intensive than traditional materials and can be identified by evaluating material Environmental Product Declarations (EPDs).*